



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,545	07/10/2006	Heiko Frohlke	FROHLKE ET AL-1 PCT	5537
25889	7590	08/25/2009		
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			EXAMINER VORTMAN, ANATOLY	
			ART UNIT	PAPER NUMBER
			2835	
			MAIL DATE	DELIVERY MODE
			08/25/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/585,545	<b>Applicant(s)</b> FROHLKE ET AL.	
	<b>Examiner</b> ANATOLY VORTMAN	<b>Art Unit</b> 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006 (new application).
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/10/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: the headings for various portions of the Specification are omitted. Further, the brief description of the drawings is placed in the end of the specification. Applicant is required to place the Specification in compliance with the USPTO requirements (see the issued US patents for example). Further, Applicant is required to review the entire Specification for possible translation errors.

### ***Claim Objections***

2. Claims 1-3, are objected to because of the following informalities: in claim 1 the limitation "the placement region" lacks antecedent basis. Further, article "the" is omitted before "connector" (on two occasions) in line 8 of the claim. Further, in claim 2, the limitation "the seal" lacks antecedent basis. Further, in claim 3, in lines 2-3 of the claim, article "the" is omitted before "connector" (on two occasions). Appropriate corrections are required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2835

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 and 14, are rejected under 35 U.S.C. 102(b) as being anticipated by

DE/29,520,913 (D1 hereafter) (cited in IDS).

Regarding claims 1, 2, and 14, D1 disclosed (Fig. 1-3) a fuse device, particularly for ensuring protection of a cable harness (1, 3), comprising a strip fuse (8) that has at least two connector contacts (9, 10), wherein at least one connector piece (5, 6) is firmly set onto at least one connector contact (10), in electrically conductive manner, and that the strip fuse (8) and the placement region of connector contact (10) and connector piece (5, 6) are sealed and covered, at least in sections, with an electrically insulating sealing material (4), wherein the cable bundle (1, 3) and the seal (4) have approximately equal cross-section dimensions, and wherein at least one opening is made in the sealing material (4) (to insert the cable harness (1, 3) and the connector piece (5, 6)) (Fig. 2).

Regarding claim 3, D1 disclosed that the connector contact (10) and the connector piece (5, 6) are rigidly connected to one another. Regarding the process limitation "welded", even though the claim is limited by and defined by the recited process, the determination of patentability of the product is based on the product itself, and does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). It is the patentability of the product claimed and not of the recited process steps which must be established. *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). It should also be noted that a "[p]roduct-

Art Unit: 2835

by process claim, although reciting subject matter of claim in terms of how it is made, is still product claim; it is patentability of product claimed and not recited process steps that must be established, in spite of fact that claim may recite only process limitations”, *In re Hirao and Sato*, 190 USPQ 15 (Fed. Cir. 1976). Therefore, the aforementioned process limitation “welded” has not been given patentable weight.

Regarding claim 4-6, D1 disclosed that the connector piece (5, 6) is a cable bracket, formed as an angled distribution profile (Fig. 3).

### ***Claim Rejections - 35 USC § 102/103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-11, are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over D1.

Regarding claims 7-11, D1 disclosed that the sealing material (4) is a thermoplastic (i.e. elastomer based on Polyurethane, p. 4, lines 30-35), which is inherently castable, pressable and injectable (when molten).

Alternatively, it would have been obvious to a person of the ordinary skill in the fuse art at the time of the invention to select any known suitable sealing insulating material (4), including as claimed, in order to achieve desired mechanical and electrical properties of the device and to

Art Unit: 2835

satisfy safety requirements, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. All claimed elements and techniques were known in the prior art and one skilled in the art could have combined / modified the elements as claimed by known methods with no change in their respective functions, and the combination / modification would have yielded predictable results to one of ordinary skill in the fuse art at the time of the invention. *See KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007).

***Claim Rejections - 35 USC § 103***

7. Claims 12 and 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over D1 in view of US/3,356,806 to Urani.

Regarding claims 12 and 13, D1 disclosed all, as applied to claim 1 above, but did not disclose that the gasket element (O-ring) is disposed at and surrounds the connector piece.

The technique of using the sealing gaskets / O-rings to seal fuse housings was not new in the fuse art at the time of the invention. For example, Urani teaches the fuse housing, which is sealed with the gaskets / O-rings (50, 92, and 102) so as to make it waterproof.

It would have been obvious to a person of the ordinary skill in the fuse art at the time of the invention to provide sealing gasket(s) / O-ring(s) around the connector piece(s) in the fuse device disclosed by D1, as taught by Urani, in order to properly seal the fuse device and to make it waterproof. All claimed elements and techniques were known in the prior art and one skilled in the art could have combined / modified the elements as claimed by known methods with no

Art Unit: 2835

change in their respective functions, and the combination / modification would have yielded predictable results to one of ordinary skill in the fuse art at the time of the invention. *See KSR International Co. v. Teleflex Inc.*, 550 U.S.\_\_\_\_, 82 USPQ2d 1385 (2007).

### ***Conclusion***

8. The remaining prior art made of record and not relied upon is considered pertinent to applicant's disclosure, because of the teachings of various electrical fuse devices with housings / enclosures comprising terminals protruding therefrom.

Furthermore, acknowledgment is made of Applicant's claim for foreign priority based on an application filed in Germany on 01/15/2004. It is noted, however, that a certified copy of this foreign application is not currently on file as required by 35 U.S.C. 119(b).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANATOLY VORTMAN whose telephone number is (571)272-2047. The examiner can normally be reached on Monday-Thursday, between 10:00 am and 8:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jayprakash Gandhi can be reached on 571-272-3740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 2835

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anatoly Vortman/

Primary Examiner, Art Unit 2835